

# Luxam Lighting, LLC

## Edge lit panel support guidelines

There are a number of variables here based on application (vertical or horizontal) and mounting or attachment method.

In a horizontal application with supports on all four sides of a square or rectangular light panel we would never recommend exceeding 3' in either direction without a center support of some kind. 3' is maximum and I would actually prefer to see a maximum of 2' in the width and then the length could run to around 6' or longer.

Critical to this however is making sure that the perimeter frame support is wide enough to retain capture of the panel when it does deflect (which it will do) and not allow the panel to fall out of the frame from one side or the other.

Another matter to consider in determining what is a safe size to avoid deflection issues is the temperature and moisture consistency within the space where the panel is installed. These are the factors that allow the panels to expand and contract which creates the deflection

For a vertical application you can go larger; up to 4' width and 8' height. If the installation is such that the panel can be touched and pushed upon then you will have deflection of almost any size panel over 2' wide. However, this deflection will not be permanent and will move back to position as it expands and contracts.

Critical to the horizontal application is that the panel should be hung from the top and captured in a perimeter frame that allows for expansion and contraction. The acrylic panel should never carry its weight on the bottom of the panel. This will cause bowing of the panel over time.

Based on design size we can calculate the deflection for the panel and make specific recommendations for spans and attachment methods.

Let me know if you need any further information regarding this question.